



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,113	03/31/2004	Arumughan Chami	U 015130-6	6597
7590	09/11/2007		EXAMINER	
Ladas & Parry 26 West 61 Street New York, NY 10023			PADEN, CAROLYN A	
			ART UNIT	PAPER NUMBER
			1761	
			MAIL DATE	DELIVERY MODE
			09/11/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/815,113	CHAMI ET AL.	
	Examiner Carolyn A. Paden	Art Unit 1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 03 August 2007.  
 2a) This action is FINAL.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-20 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-20 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

The rejection of the claims under 35 USC 112 has been withdrawn.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 6-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khattoon taken with Majumdar in view of Gunstone taken with Schijf.

Khattoon teaches the interesterification of palm oil with rice bran oil in Table 2 by using sodium methoxide as a catalyst (see abstract). The process of interesterification is disclosed on pages 33-34 of the article. The margarine is made. The product is described as having fat crystallization characteristics like butter. Majumdar discloses the interesterification of palm stearin with vegetable oils; especially rice bran oil in Table II. The interesterification process is shown on page 235 in column 2. The process includes sodium methoxide catalyst. Then the catalyst is destroyed by adding hot water, the product is washing and undergoes steam distillation under high vacuum. Khattoon with taken with Majumdar teach that the process of interesterifying two oils is known in the art as a way to prepare

margarine. Although combining palm oil with palm stearin and rice bran oil is not specifically mentioned, it would have been obvious to include more than two oil sources for interesterifying in order to further modify the physical properties of the reacted fat. The claims appear to differ from Khatton taken with Majumdar in the use of a crystallizer. Schijf is relied upon to show that it is known in the art to interesterify fats, inactivate the catalyst with water, dry and deodorize the fat and then make margarine from the fat in a Votator. Gunstone is relied upon to describe the votator as a scraped surface heat exchanger that is used to solidify and plasticize fats in the manufacture of shortening and margarine (last paragraph on page 149, figure 18.1 and "blending and chilling" paragraph on page 153. The chilling conditions for the Votator are described on page 150. So even though "margarine crystallizer" is not specifically mentioned, it is clear from the description of the Votator in Schijf and Gunstone that the Votator functions as a margarine crystallizer. It is appreciated that the feed rate, backpressure, and mutator speed are not described but the feed rate would have been expected to depend from the particular processing apparatus used in the margarine manufacture. Tempering of shortening is described on page 150. The concept of "tubbing" margarine is described in Tables

18.2 and 18.3. Even though tubbed shortening is not mentioned, it would have been obvious to put shortening in a tub to provide a consumer suitable product size. It is appreciated that the tocol, oryzanol and phytosterol content of the spread is not mentioned but rice bran oil is known to be enriched with these particular ingredients. Further it would have been obvious to fortify shortening with tocol, oryzanol and phytosterols to enhance the stability and health benefits of shortening. The lack of trans in the shortening would have been the obvious result of the use of a process that did not include complete hydrogenation.

Applicant argues that Khattoon and Majumdar do not provide for fat crystallization crystallization. But each of Gunstone and Schijf provide for fat crystallization.

Applicant argues the specific refrigerant temperatures of claims 6-20. But crystallization of edible spreads is well known in the art. It would have been obvious to adjust the processing conditions of Khattoon according to optimal desired parameters for making a spread. No difference is seen between the trans, tocol and phytosterols content of the claims. As to any trans content, it would have been obvious to omit the trans fat from Schijf in order to maximize the healthy non-trans fats in foods.

Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khatton taken with Majumdar in view of Gunstone taken with Schijf, as applied to claims 1 and 6-20 above, and further in view of Baileys in combination with Nakhashi for reasons of record.

Applicants' arguments are directed to the rejection of claim 1.

Applicant argues that palm oil is heated prior to mixing with rice bran oil. This difference has been considered but no unobvious or unexpected result is seen between the ways the oil are made. Applicant argues that the vacuum conditions of the reaction are different but the extent of vacuum in the process would have been within the determination of one of ordinary skill in the art. Applicant argues separating the aqueous layer and washing with water but Khatoon teaches these steps.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final

action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn A Paden whose telephone number is (571) 272-1403. The examiner can normally be reached on Monday to Friday from 7 am to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks, can be reached on (571) 272-1401 or by dialing 571-272-1700. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is

available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Carolyn Paden*  
CAROLYN PADEN 9-6-07  
PRIMARY EXAMINER 1761